

1. Nucleic acid, characterized in that it comprises:

a) a first region which comprises a nucleic acid which encodes the transactivator of the tetracycline-regulated system (tTA) under the control of a moderate promoter, and

b) a second region which comprises a nucleic acid of interest under the control of a tTA-sensitive promoter,

and in that the two regions a) and b) are arranged in the same transcriptional orientation.

2. Nucleic acid according to claim 1, characterized in that it additionally comprises a third region c), which is arranged between the two regions a) and b) and which restricts transcriptional interference between regions a) and b).

3. Nucleic acid according to claim 2, characterized in that region c) comprises a transcription terminator, preferably a UMS sequence.

4. Nucleic acid according to any one of the preceding claims, characterized in that, in region a), the moderate promoter is a cell promoter which is preferably constitutive and tissue-specific.

5. Nucleic acid according to claim 4, characterized in that the moderate cell promoter is selected from the promoters of the PGK, DHFR, EF1a,  $\beta$ -actin,  $\beta$ -globin and MHCa genes.

6. Nucleic acid according to any one of the preceding claims, characterized in that, in region b), the nucleic acid of interest is a nucleic acid which encodes a protein or a polypeptide of interest.

5 7. Nucleic acid according to claim 6, characterized in that the protein or the polypeptide of interest is selected from neurotransmitters or their precursors or enzymes for synthesizing them, and trophic factors.

10 8. Nucleic acid according to any one of the preceding claims, characterized in that, in region b), the promoter is a promoter which functions in mammalian cells.

15 9. Nucleic acid, characterized in that it comprises:

a) a first region which comprises a nucleic acid which encodes the transactivator of the tetracycline-regulated system (tTA) under the control of the promoter of the PGK gene, and

20 b) a second region which comprises a nucleic acid which encodes human tyrosine hydroxylase under the control of a minimal CMV promoter which has been modified so as to contain from 1 to 10 tetOp sequences,

c) a third region which comprises the UMS  
25 sequence,

and in that the two regions a) and b) are arranged in the same transcriptional orientation.

10. Vector which comprises a nucleic acid

according to any one of claims 1 to 9.

11. Vector according to claim 10,  
characterized in that it is a viral vector, preferably  
an adenovirus.

5           12. Cell which comprises a nucleic acid  
according to any one of claims 1 to 9 or a vector  
according to claim 10.

13. Cell according to claim 12,  
characterized in that it is a mammalian cell,  
10 preferably a human cell.

14. Cell according to claim 13,  
characterized in that it is a nerve cell.

15. Nerve cell which is genetically modified  
by a recombinant adenovirus which comprises a nucleic  
15 acid according to claim 9.

16. Composition which comprises cells  
according to one of claims 12 to 15.

17. Use of a nucleic acid according to one  
of claims 1 to 9 or of a vector according to claim 10  
20 or of a composition according to claim 16, for  
preparing a composition which is intended to express a  
nucleic acid of interest in vivo.

18. Use of a nucleic acid according to one  
of claims 1 to 9 or of a vector according to claim 10  
25 or of a composition according to claim 16, for  
preparing a composition which is intended to express a  
nucleic acid of interest in the nervous system in vivo.